

AMENDMENTS TO THE CLAIMS

Please cancel claims 1-4, 9-19, 71, 74-81, 88, and 94-111, amend claims 86 and 112, and add new claims 113-121 as follows:

1-85. (Cancelled)

86. (Currently Amended) In a computer-implemented animation system, a method for animating an object, the method comprising:

receiving an input, ~~the input~~ specifying [[a]] an Align to Motion behavior, the Align to Motion behavior indicating how to change a value of a rotation parameter of the object over time based on a motion path of the object such that the rotation parameter is not changed if the motion path is straight;

animating the object by changing the value of the rotation parameter of the object over time according to the specified Align to Motion behavior; and
outputting the animated object;

wherein ~~the behavior comprises an Align to Motion behavior, which changes a rotation of the object based on a motion path of the object such that the rotation is not changed if the motion path is straight, and which the Align to Motion behavior can be configured regarding at least one of:~~

a spring tension parameter, which determines how quickly the object's rotation changes based on a change in the object's motion path;

an axis parameter, which determines whether the object's rotation is based on an X value of the object's position or a Y value of the object's position; and
a drag parameter, which determines whether or not the object's change in rotation overshoots a new direction of the object.

87-111. (Cancelled)

112. (Currently Amended) In a computer-implemented animation system, a method for animating an object, the method comprising:

receiving an input, ~~the input~~ specifying [[a]] an Attracted To behavior, the Attracted To behavior indicating how to change a value of a position parameter of the object over time based on a position of a second object while not affecting the position of the second object;

animating the object by changing the value of the position parameter of the object over time according to the specified Attracted To behavior; and
outputting the animated object;

wherein the behavior comprises one from a group consisting of:

~~an Attracted To behavior, which changes a position of the object based on a position of a second object while not affecting the position of the second object;~~

~~an Attractor behavior, which changes a position of a second object based on a position of the object while not affecting the position of the object;~~

~~a Drift Attracted To behavior, which changes a position of the object based on a position of a second object while not affecting the position of the second object; and~~

~~a Drift Attractor behavior, which changes a position of a second object based on a position of the object while not affecting the position of the object; and~~

wherein the Attracted To behavior can be modified using at least one of:

~~a falloff rate parameter, which determines a rate of acceleration with which an attracted object moves towards an object of attraction~~ the object moves towards the second object;

an influence parameter, which determines an area of influence, the area of influence determining whether the object is affected by the Attracted To behavior;

a falloff type parameter, which determines whether a distance defined by the influence parameter falls off linearly or exponentially;

a strength parameter, which determines a speed at which the object moves towards the second object; and

a drag parameter, which determines whether ~~an attracted object overshoots an object of attraction~~ the object overshoots the second object.

113. (New) In a computer-implemented animation system, a method for animating an object, the method comprising:

receiving an input specifying a Grow/Shrink behavior, the Grow/Shrink behavior indicating how to change a value of a scale parameter of the object over time by either changing a size of the object by a steady number of pixels per second or changing the object's size from an original size to a final size;

animating the object by changing the value of the scale parameter of the object over time according to the Grow/Shrink behavior; and

outputting the animated object;

wherein the Grow/Shrink behavior can be configured regarding:

if the object's size is changing by a steady number of pixels per second, a first number of horizontal pixels and a second number of vertical pixels, wherein the first number is added to the object's horizontal size each second, and wherein the second number is added to the object's vertical size each second;

if the object's size is changing from the original size to the final size, a first number of horizontal pixels and a second number of vertical pixels, wherein the first number represents horizontal pixels in the final size, and where the second number represents vertical pixels in the final size; and

an acceleration with which the object's size changes over time.

114. (New) The method of claim 113, wherein the Grow/Shrink behavior can be further configured regarding:

a number of frames by which to offset an end of the Grow/Shrink behavior's effect relative to a last frame of a position of the Grow/Shrink behavior in a timeline.

115. (New) In a computer-implemented animation system, a method for animating an object, the method comprising:

receiving an input specifying an Orbit Around behavior, the Orbit Around behavior indicating how to change a value of a position parameter of the object over time based on a position of a second object while not affecting the position of the second object;

animating the object by changing the value of the position parameter of the object over time according to the Orbit Around behavior; and
outputting the animated object;

wherein the Orbit Around behavior can be configured regarding:

a falloff rate parameter, which determines a rate of acceleration with which the object moves around the second object;

an influence parameter, which determines an area of influence, the area of influence determining whether the object is affected by the Orbit Around behavior;

a falloff type parameter, which determines whether a distance defined by the influence parameter falls off linearly or exponentially; and

a strength parameter, which determines a speed at which the object moves around the second object.

116. (New) In a computer-implemented animation system, a method for animating an object, the method comprising:

receiving an input specifying a Random Motion behavior, the Random Motion behavior indicating how to change a value of a position parameter of the object over time based on a random motion path;

animating the object by changing the value of the position parameter of the object over time according to the Random Motion behavior; and

outputting the animated object;

wherein the Random Motion behavior can be configured regarding:

an amount parameter, which determines a length of the motion path;

a frequency parameter, which determines a crookedness of the motion path;

a noisiness parameter, which determines a level of jaggedness along the motion path; and

a drag parameter, which determines a speed at which the object moves along the motion path.

117. (New) A computer program product for animating an object, the computer program product comprising a computer-readable storage medium containing computer program code for:

receiving an input specifying an Align to Motion behavior, the Align to Motion behavior indicating how to change a value of a rotation parameter of the object over time based on a motion path of the object such that the rotation parameter is not changed if the motion path is straight;

animating the object by changing the value of the rotation parameter of the object over time according to the Align to Motion behavior; and

outputting the animated object;

wherein the Align to Motion behavior can be configured regarding:

a spring tension parameter, which determines how quickly the object's rotation changes based on a change in the object's motion path;

an axis parameter, which determines whether the object's rotation is based on an X value of the object's position or a Y value of the object's position; and

a drag parameter, which determines whether or not the object's change in rotation overshoots a new direction of the object.

118. (New) A computer program product for animating an object, the computer program product comprising a computer-readable storage medium containing computer program code for:

receiving an input specifying an Attracted To behavior, the Attracted To behavior indicating how to change a value of a position parameter of the object over time based on a position of a second object while not affecting the position of the second object;

animating the object by changing the value of the position parameter of the object over time according to the Attracted To behavior; and

outputting the animated object;

wherein the Attracted To behavior can be modified using ~~at least one of~~:

a falloff rate parameter, which determines a rate of acceleration with which the object moves towards the second object;

an influence parameter, which determines an area of influence, the area of influence determining whether the object is affected by the Attracted To behavior;

a falloff type parameter, which determines whether a distance defined by the influence parameter falls off linearly or exponentially;

a strength parameter, which determines a speed at which the object moves towards the second object; and

a drag parameter, which determines whether the object overshoots the second object.

119. (New) A computer program product for animating an object, the computer program product comprising a computer-readable storage medium containing computer program code for:

receiving an input specifying a Grow/Shrink behavior, the Grow/Shrink behavior indicating how to change a value of a scale parameter of the object over time by either changing a size of the object by a steady number of pixels per second or changing the object's size from an original size to a final size;

animating the object by changing the value of the scale parameter of the object over time according to the Grow/Shrink behavior; and

outputting the animated object;

wherein the Grow/Shrink behavior can be configured regarding:

if the object's size is changing by a steady number of pixels per second, a first number of horizontal pixels and a second number of vertical pixels, wherein the first number is added to the object's horizontal size each second, and wherein the second number is added to the object's vertical size each second;

if the object's size is changing from the original size to the final size, a first number of horizontal pixels and a second number of vertical pixels, wherein the first number represents horizontal pixels in the final size, and where the second number represents vertical pixels in the final size; and

an acceleration with which the object's size changes over time.

120. (New) A computer program product for animating an object, the computer program product comprising a computer-readable storage medium containing computer program code for:

receiving an input specifying an Orbit Around behavior, the Orbit Around behavior indicating how to change a value of a position parameter of the object over time

based on a position of a second object while not affecting the position of the second object;
animating the object by changing the value of the position parameter of the object over time according to the Orbit Around behavior; and
outputting the animated object;

wherein the Orbit Around behavior can be configured regarding:

a falloff rate parameter, which determines a rate of acceleration with which the object moves around the second object;
an influence parameter, which determines an area of influence, the area of influence determining whether the object is affected by the Orbit Around behavior;
a falloff type parameter, which determines whether a distance defined by the influence parameter falls off linearly or exponentially; and
a strength parameter, which determines a speed at which the object moves around the second object.

121. (New) A computer program product for animating an object, the computer program product comprising a computer-readable storage medium containing computer program code for:

receiving an input specifying a Random Motion behavior, the Random Motion behavior indicating how to change a value of a position parameter of the object over time based on a random motion path;
animating the object by changing the value of the position parameter of the object over time according to the Random Motion behavior; and
outputting the animated object;

wherein the Random Motion behavior can be configured regarding:

an amount parameter, which determines a length of the motion path;

a frequency parameter, which determines a crookedness of the motion path;
a noisiness parameter, which determines a level of jaggedness along the motion path; and
a drag parameter, which determines a speed at which the object moves along the motion path.